

SDS Report

Samples Name: silk

Client Name: Zhenjiang Flashforge 3D Technology Co.,Ltd.

Client Address: No.518 ,Xianyan Road,Wucheng District,Jinhua City,Zhejiang Province.



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 1 of 7

Section 1 - Identification of the substance/preparation and of the company/undertaking

Product identifier

Product Name : silk
Trade Name: 3D printed lines
Chemical Uses: 3D printing supplies
File Numbers : WTH20H08059815C-2
Transport Fashion: Air, sea, rail, highway

Details of the supplier of the safety data sheet

Manufacture/Supplier : Zhenjiang Flashforge 3D Technology Co.,Ltd.
Address: No.518 ,Xianyan Road,Wucheng District,Jinhua City,Zhejiang Province.
Tel : 181 5795 7275
Emergency number : 0579-89007351
E-mail : 184021419@qq.com
Further information obtainable from: Zhenjiang Flashforge 3D Technology Co.,Ltd.

Section 2 - Hazards Identification

	Min	Max	
Flammability	1		0=Minimum
Toxicity	0		1=Low
Body Contact	0		2=Moderate
Reactivity	1		3=High
Chronic	0		4=Extreme

GHS classification:

Not applicable

Label elements:

Not applicable

SIGNAL WORD:

Not applicable

Section 3 –Composition/Information on Ingredients

Ingredient Name	CAS No.	EC No.	Content (%)
PLA	26100-51-6	--	>71.5
Pbat	60961-73-1	--	>3
Toughener	25035-69-2	630-433-6	>5
PET	25038-59-9	607-507-1	>20
Other additives	--	--	<0.5



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 2 of 7

Section 4 - First Aid Measures

INGESTION

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

- Treat symptomatically.

Section 5 - Fire Fighting Measures

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 3 of 7

- Severe fire hazard when exposed to heat, flame and/or oxidisers.
- Vapour may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 –Accidental Release Measures

MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety glasses.
- Use dry clean up procedures and avoid generating dust.
- Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- Do NOT use air hoses for cleaning
- Place spilled material in clean, dry, sealable, labelled container.

MAJOR SPILLS

- Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.
- Control personal contact by wearing protective clothing.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

Section 7 - Handling and Storage

PRECAUTIONS FOR SAFE HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.

SUITABLE CONTAINER

- Lined metal can, lined metal pail/ can.
- Plastic pail.



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 4 of 7

- Polyliner drum.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

- Avoid contamination of water, foodstuffs, feed or seed.
- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.

Section 8 - Exposure Controls, Personal Protection

APPROPRIATE ENGINEERING CONTROLS

For molten materials:

Provide mechanical ventilation; in general such ventilation should be provided at compounding/ converting areas and at fabricating/ filling work stations where the material is heated. Local exhaust ventilation should be used over and in the vicinity of machinery involved in handling the molten material

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

PERSONAL PROTECTION



EYE AND FACE PROTECTION

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

SKIN PROTECTION

See Hand protection below



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 5 of 7

HANDS/FEET PROTECTION

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Suitability and durability of glove type is dependent on usage.

BODY PROTECTION

See Other protection below

OTHER PROTECTION

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash unit.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Strip
Color	No data.
Form	Solid
Odor	Odorless
Melting Range (°C)	No data.
Boiling Range (°C)	No data.
Flash Point (°C)	No data.
Decomposition Temp (°C)	No data.
Autoignition Temp (°C)	No data.
Upper Explosive Limit (%)	No data.
Lower Explosive Limit (%)	No data.
Volatile Component (%vol)	No data.
Molecular Weight	No data.
Viscosity	No data.
Solubility in water (g/L)	No data.
pH (1% solution)	No data.
pH (as supplied)	No data.
Vapour Pressure (kPa)	No data.
Specific Gravity (water=1)	No data.
Relative Vapour Density (air=1)	No data.
Evaporation Rate	No data.



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 6 of 7

Section 10 - Stability and Reactivity

Reactivity

See section 7

Chemical stability

- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Section 11 - Toxicological Information

Toxicity and Irritation

Information on toxicological affects

Acute Toxicity

No data

LD/LC50 values relevant for classification

No data.

Primary irritant effect

On the skin:

No data.

On the eyes:

No data.

Inhaled: No data.

Sensitization: No data.

Section 12 - Ecological Information

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
PLA	No Data Available	No Data Available	No Data Available	No Data Available
Pbat	No Data Available	No Data Available	No Data Available	No Data Available
Toughener	No Data Available	No Data Available	No Data Available	No Data Available
PET	No Data Available	No Data Available	No Data Available	No Data Available
Other additives	No Data Available	No Data Available	No Data Available	No Data Available



Safety Data Sheet(SDS)

According to GHS

Report No.: WTH20H08059815C-2

Date: Aug. 31, 2020

Page 7 of 7

Section 13 - Disposal Considerations

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

Section 14 - Transport Information

Labels Required

Marine Pollutant: NO

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

Not Applicable.

Section 16 - Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This information of section 1, 3 and 9 is provided by Zhenjiang Flashforge 3D Technology Co.,Ltd.

*** End ***

This file is considered invalidated without the Special Seal for Inspection of the HCT, This file shall not be altered, increased or deleted. Without written approval of HCT, this report shall not be copied except in full and published as advertisement. The file and the data must not be used in legal affairs, according to the agreement with HCT and the Applicant.

